查询SPI5842供应商

AUK Semiconductor

SPI5842

Photo Diode

Features

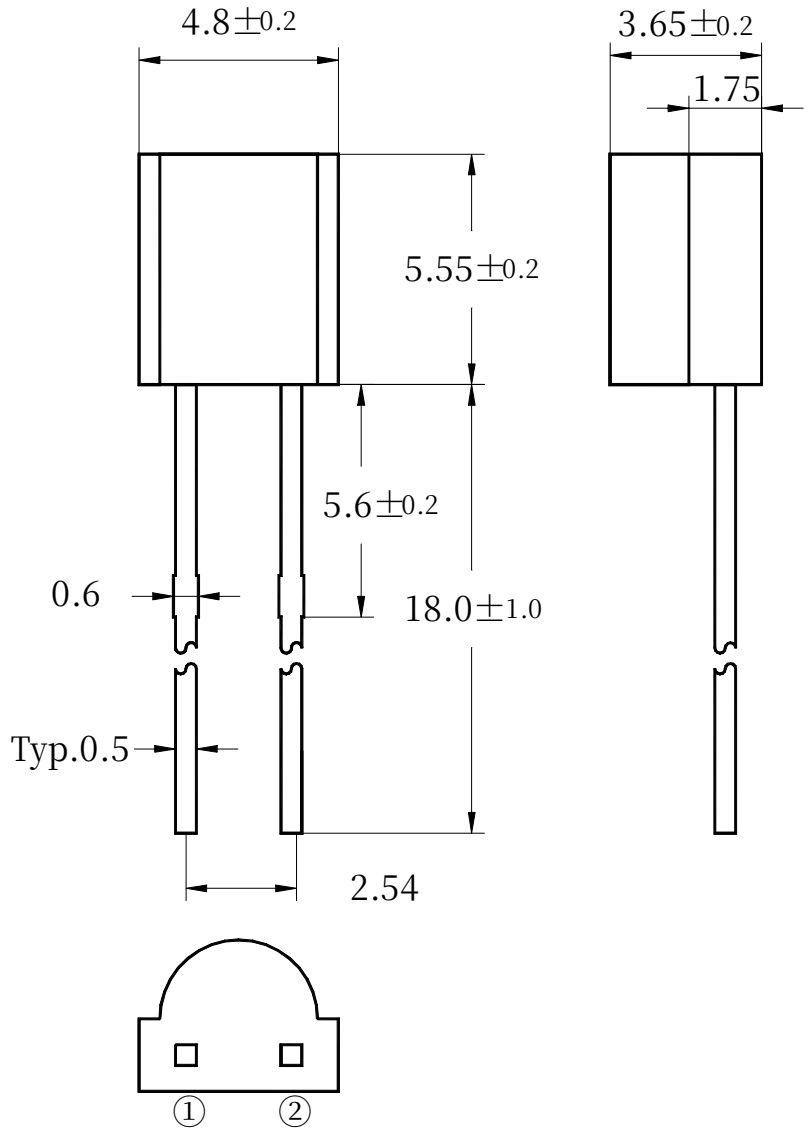
- Peak sensitivity wavelength matching with infrared LED(λ_P=950nm)
- 4.8mm × 5.5mm side view package
- Black colored visible light cut-off lens

Application

- Infrared remote controllers for TVs, VCRs, Audio equipment etc

Outline Dimensions

unit : mm



PIN Connections
1. Anode
2. Cathode

Absolute maximum ratings

Characteristic	Symbol	Ratings	Unit
Reverse Voltage	V_R	40	V
Power Dissipation	P_D	170	mW
Operating Temperature	T_{opr}	-20 70	℃
Storage Temperature	T_{stg}	-25 85	℃
*[1]Soldering Temperature	T_{sol}	260℃ for 5 seconds	

*1.Keep the distance more than 2.0mm from PCB to the bottom of Photo Diode package

Electrical Characteristics

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
*[1]Short Circuit Current	I_{SC}	E_e=6mW/㎠	-	40	-	uA
Dark Current	I_D	V_R=10V	-	-	50	nA
Capacitance	C_t	V_R=10V, f=1MHz	-	10	-	pF
Spectral Sensitivity	$\Delta\lambda$	-	840 ~ 1,050			nm
Peak Sensitivity Wavelength	λ_P	-	-	940	-	nm
Half angle	$\theta^1/_2$	-	-	±55	-	deg

*1. E_e : Irradiance by infrared LED light source(λ_p=940nm)

Characteristic Diagrams

Fig. 1 I_{SC} - E_e

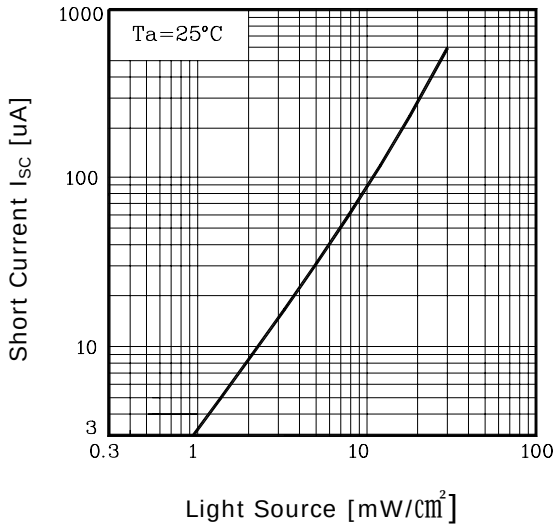


Fig. 2 I_D - T_a

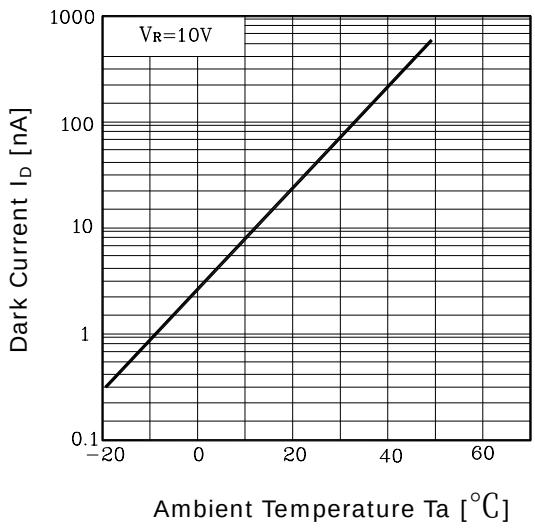


Fig. 3 C_t – V_R

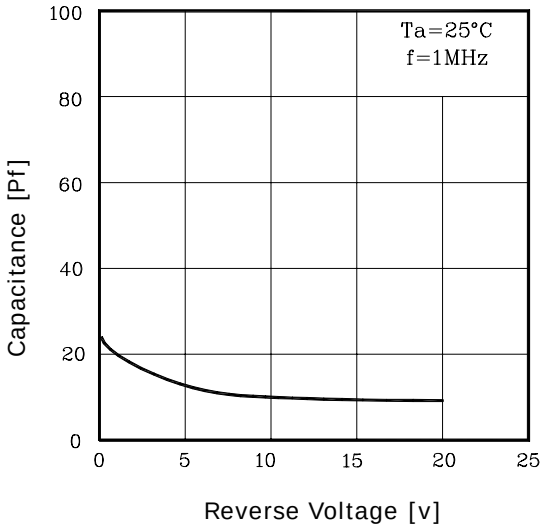


Fig.4 I_D – V_R

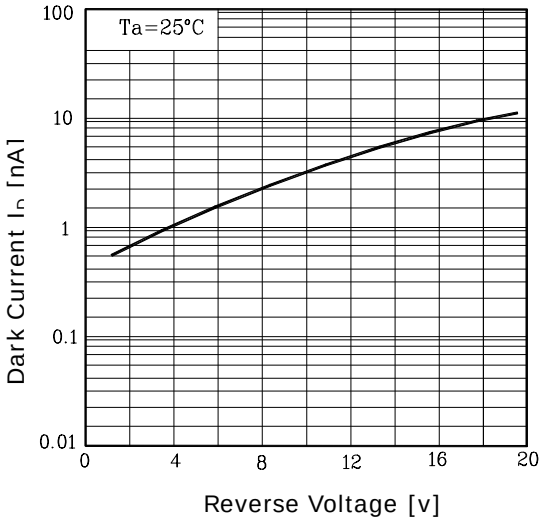


Fig.5 Spectrum Sensitivity

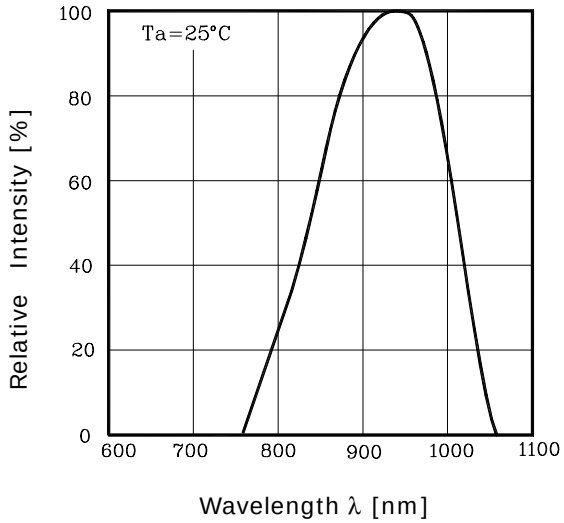


Fig. 5-1 Radiation Diagram